

A NEW GENUS AND SPECIES OF OONOPID SPIDERS FROM LAOS (ARANEAE, OONOPIDAE)

TONG Yan-Feng¹, LI Shu-Qiang^{2*}

1. Chemistry and Life Science College, Shenyang Normal University, Shenyang 110034, China; E-mail: tyf68@hotmail.com

2. Institute of Zoology, Chinese Academy of Sciences, Beijing 100101, China

Abstract A new oonopid spider genus *Vientiane* gen. nov., was erected for a new species *Vientiane peterjaegeri* sp. nov. from Laos.

Key words Taxonomy, distribution, diagnosis, type, Southeast Asia.

1 Introduction

Oonopidae are an extremely diverse spider family with 1 135 described species in 93 genera (Platnick, 2013). They can be found in leaf litter, under bark and even in the tree canopy (e. g., Baehr, 2011; Baehr & Harvey, 2013; Tong & Li, 2010, 2011). The oonopid spider fauna of Laos has been poorly studied. Hitherto, only six genera and ten species of oonopid spiders are recorded from Laos (Platnick *et al.*, 2012; Tong & Li, 2013). They are *Gamasomorpha comosa* Tong & Li, 2009, *Ischnothyreus corollaceous* Tong & Li, 2013, *I. tadetu* Tong & Li, 2013, *I. tadfane* Tong & Li, 2013, *Opopaea cornuta* Yin & Wang, 1984, *O. lemniscata* Tong & Li, 2013, *O. tumida* Tong & Li, 2013, *Pelcinus tham* Platnick *et al.*, 2012, *Xestaspis loricata* (L. Koch, 1873) and *Xyphinus pakse* Tong & Li, 2013. The present paper describes a new oonopid spider genus from this region.

2 Material and Methods

The specimens were examined using a Leica M205C stereomicroscope. Details were studied under an Olympus BX51 compound microscope. All illustrations were made using a drawing tube and inked on ink jet plotter paper. Photos were made with a Canon EOS 550D zoom digital camera (18 megapixels) mounted on an Olympus BX51 compound microscope. Vulvae were cleared in lactic acid. All measurements were taken using an Olympus BX51 compound microscope and are in millimeters.

The following abbreviations are used in the text: ALE = anterior lateral eyes; PLE = posterior lateral eyes; PME = posterior median eyes.

All specimens are deposited in the Institute of

Zoology, Chinese Academy of Sciences in Beijing (IZCAS).

3 Taxonomy

Family Oonopidae Simon, 1890

Vientiane gen. nov.

Type species: *Vientiane peterjaegeri* sp. nov.

Etymology. The generic name is derived from the Province name of the type locality of its type species, considered feminine in gender.

Diagnosis. With its enlarged male palpal patella the new genus resembles *Camptoscaphiella* Caporiacco, 1934, *Malagiella* Ubick & Griswold, 2011, *Opopaea* Simon, 1891 and *Prethopalpus* Baehr *et al.*, 2012, but can be distinguished by the unique structure of female genitalia (Figs 21–23, 32–33), the partly fused male palpal bulb and cymbium, the complicated male palpal bulb (Figs 24–25, 27–30), the deeply incised labium in females and males, the strongly modified male endites (Figs 6, 19, 26, 31) and the different eyes pattern (Figs 5, 17). The new genus also differs from *Camptoscaphiella* and *Malagiella* by the abdominal scutum covering the whole abdomen, and by the unmodified anterolateral margin of the male sternum; from *Opopaea* it differs by the pairs of spines on legs I and II and the unmodified scuto-pedichel region; from *Prethopalpus* by the pairs of spines on legs I and II.

Distribution. Laos (Vientiane Province).

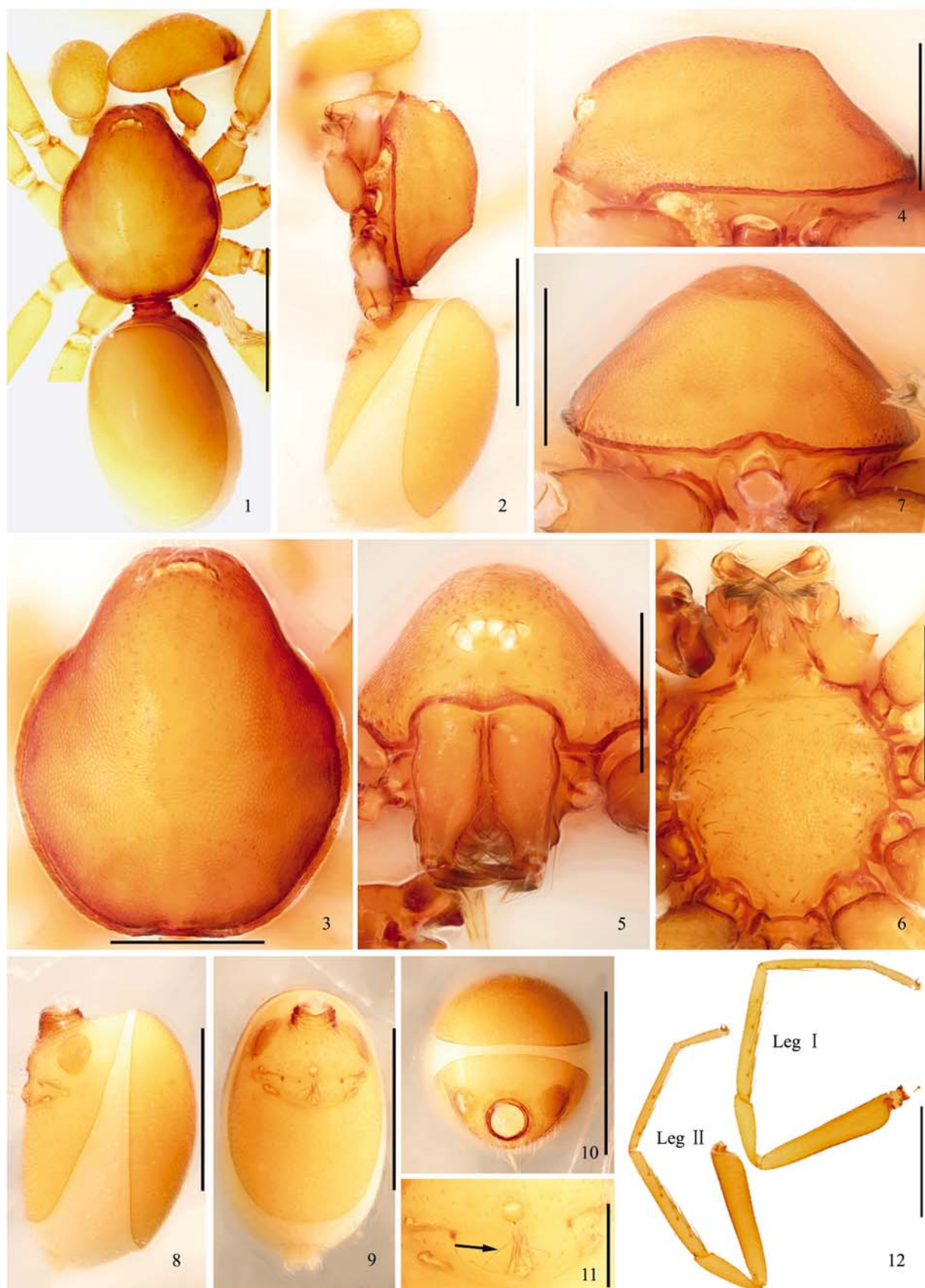
Vientiane peterjaegeri sp. nov. (Figs 1–33)

Holotype male (IZCAS AR 19393), Laos, Vientiane Province, Vang Vieng District, 4.01 km North of Vieng keo Village, Lom Cave (18°57'N, 102°26'E; alt. 314 m), 2012-12-02, leg. YAO Z-Y. **Paratypes:** 1 female (IZCAS AR 19393), same data

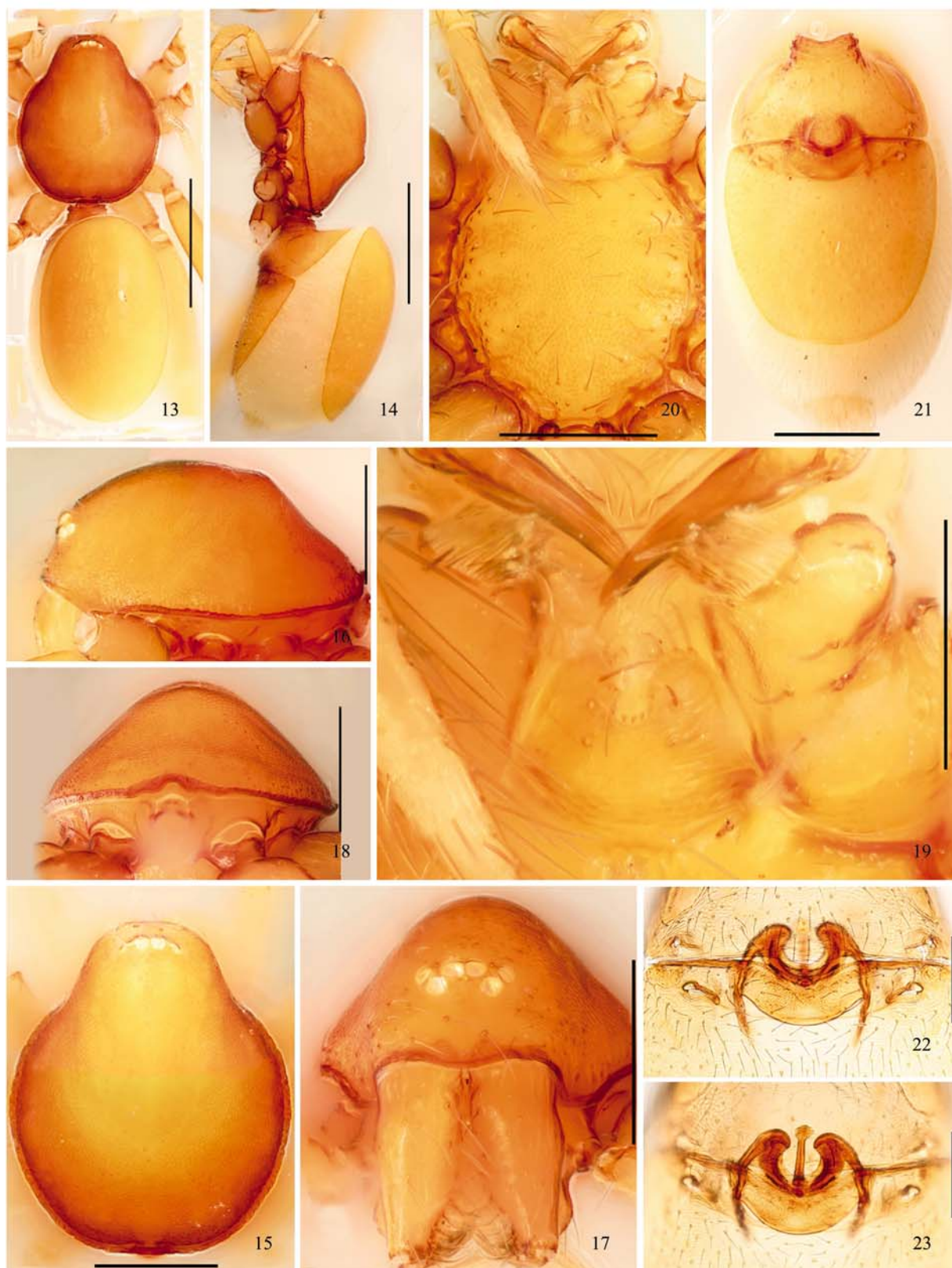
* Corresponding author, E-mail: lisq@ioz.ac.cn

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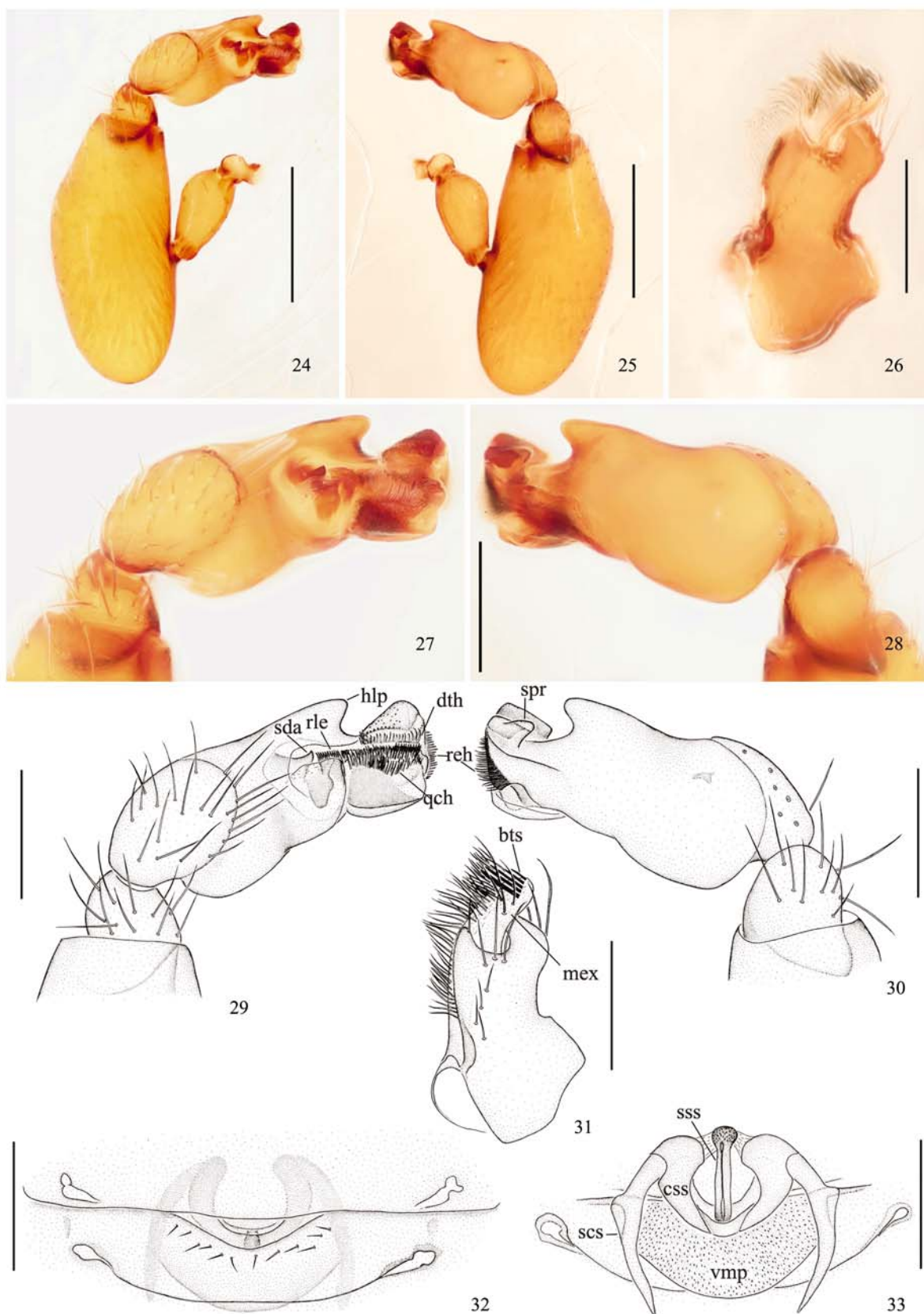
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Figs 1 – 12. *Vientianea peterjaegeri* sp. nov., male. 1 – 2. Habitus, dorsal and lateral views. 3 – 7. Prosoma, dorsal, lateral, anterior, ventral and posterior views. 8 – 10. Abdomen, lateral, ventral and anterior views. 11. Epigastric region, ventral view (arrow shows the bundle of setae). 12. Left leg I and II, prolateral views. Scale bars: 1 – 2, 8 – 10, 12 = 0.8 mm; 3 – 7 = 0.4 mm; 11 = 0.2 mm.



Figs 13 – 23. *Vientiane paterjaegeri* sp. nov., female. 13 – 14. Habitus, dorsal and lateral views. 15 – 18, 20. Prosoma, dorsal, lateral, anterior, posterior and ventral views. 19. Labium and endites, ventral view. 21. Abdomen, ventral view. 22 – 23. Genital area, ventral and dorsal views. Scale bars: 13 – 14 = 0.8 mm; 15 – 18, 20 = 0.4 mm; 19, 21 – 23 = 0.2 mm.



Figs 24 – 33. *Vientianea peterjaegeri* sp. nov. 24 – 25. Male left palp, prolateral and retrolateral views. 26, 31. Male left endite, ventral and dorsal views. 27 – 29. Male left palpal bulb. 27, 29. Prolateral views. 28, 30. Retrolateral views. 32 – 33. Female genital area, ventral and dorsal views. Abbreviations: bts. Bundle of thick setae. css. Circular strongly sclerite. dth. Delicate, nearly transparent hairs. hlp. Horn-like protrusion. mex. Membranous extensions. reh. Regular hairs. rle. Rake-like extension. qch. Quill-coverts like hairs. scs. Smoothly curved sclerite. sda. Small dark apophysis. spr. Small protuberance. sss. Stick-shaped sclerite. vmp. Ventrally membranous plate. Scale bars; 24 – 25 = 0.4 mm; 26 – 33 = 0.2 mm.

as holotype; 1 female (IZCAS AR 19414), same data as holotype.

Etymology. The specific name is in honor of Dr. Peter Jäger (Senckenberg Research Institute), who organized the excursion to Laos during 2012; noun.

Diagnosis. The new species can be distinguished from the other oonopid spiders by the unique structure of female genitalia (Figs 21 – 23, 32 – 33), the enlarged male palpal patella and the complicated male palpal bulb (Figs 24 – 25, 27 – 30).

Description. Male (holotype). Yellowish species. Body length 2.43; carapace 1.08 length, 0.88 width; abdomen 1.35 length, 0.82 width. Habitus as in Figs 1 – 2. Carapace finely reticulated, pars cephalica slightly elevated in lateral view (Figs 3 – 4). Eyes six, in one group. PME and ALE nearly equal sized, PLE smallest; posterior eye row recurved from above, straight from front; ALE nearly unseen from above, separated by more than twice of their diameters, ALE-PLE separated by less than ALE radius, PME nearly touching, PLE-PME separated by slightly more than PME radius. Clypeus margin unmodified; clypeus height about 5 times of ALE diameter (Fig. 5). Chelicerae straight. Sternum longer than wide, uniform, fused to carapace; surface finely punctuate; radial furrows present between coxae I – II, II – III, III – IV (Fig. 6). Anterior margin of labium deeply incised; anterior margin of endites strongly excavated, with a slightly sclerotized membranous extension (mex) and a bundle of thick setae (bts) (Figs 6, 26, 31). Legs slender, legs I and II each with 5 pairs of spines on tibiae and 2 pairs of spines on metatarsi (Fig. 12), legs III and IV spineless. Abdomen: dorsal scutum strongly sclerotized, finely reticulate, covering full length of abdomen. Book lung covers middle sized, nearly round, darker brown than surrounding abdomen (Fig. 8). Pedicel tube short, ribbed, scuto-pedicel region unmodified (Fig. 10), scutum not extending far dorsal of pedicel. Epigastric scutum strongly sclerotized, surrounding pedicel; postepigastric scutum strongly sclerotized, covering nearly full length of abdomen, fused to epigastric scutum (Fig. 9). Sperm pore large; posterior spiracles connected by groove, with a bundle of strong setae at the middle of the level between posterior spiracles (Fig. 11); posteriorly directed apodemes absent. Spinneret scutum present, incomplete ring. Supra-anal scutum absent. Palp: patella greatly enlarged, attached to femur medially; tibia small; cymbium and bulb partly fused; bulb elongated, nearly rectangular, dorsally with a horn-like protrusion (hlp); middle part with a small dark apophysis (sda) and a rake-like extension (rle) in

prolateral view; distal part very complicated, separated into two parts, the upper part nearly triangular, with microsculptures at surface, the lower part with many quill-coverts-like hairs (qch), with a row of delicate, nearly transparent hairs (dth) in between; the distal part including a small protuberance (spr) and a row of regular hairs (reh) (Figs 24 – 25, 27 – 30) in retrolateral view.

Female. As in male except as noted. Body length 2.49; carapace 1.09 length, 0.93 width; abdomen 1.33 length, 1.04 width. Habitus as in Figs 13 – 14. Endites unmodified (Figs 19 – 20). Postepigastric scutum not fused to epigastric scutum. Genitalia (Figs 21 – 23, 32 – 33): ventral view: the middle of the anterior margin of the postepigastric scutum is excavated, with a black spot near the epigastric furrow and a dark, half circle shaped shadow visible through the integument; dorsal view: medially with a stick-shaped sclerite (sss), the anterior part of which is slightly swelling, laterally surrounded by a nearly circular strongly sclerite (css), from the distal part of which is a smoothly curved sclerite (scs) extending, directed posteriorly, ventrally with a large membranous plate (vmp), which has a very coarsely surface.

Distribution. Known only from the type locality.

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老挝卵形蛛科一新属及一新种记述

佟艳丰¹ 李枢强^{2*}

1. 沈阳师范大学 沈阳 110034, E-mail: tyf68@hotmail.com

2. 中国科学院动物研究所 北京 100101

摘要 记述了采自老挝的卵形蛛科 1 新属及 1 新种, 彼得万象蛛 *Vientianea peterjaegeri* gen. nov. et sp. nov.。模式标本保存在中国科学院动物研究所。

万象蛛属, 新属 *Vientianea* gen. nov.

模式种: *Vientianea peterjaegeri* sp. nov.

词源: 新属名称源于物种模式产地的省名, 词性为阴性。

鉴别特征 新属雄性触肢膝节极其膨大, 与该科的拟巨膝蛛属 *Camptoscaphiella* Caporiacco, 1934, 马达加斯加蛛属 *Malagiella* Ubick & Griswold, 2011, 巨膝蛛属 *Opopaea* Simon, 1891 及膨须蛛属 *Prethopalpus* Baehr et al., 2012 相似, 但雌性生殖器结构明显不同 (图 21 ~ 23, 32 ~ 33), 雄性触肢生殖球和跗舟部分愈合, 生殖球结构复杂 (图 24 ~ 25, 27 ~ 30), 雌雄两性的下唇均具很深的缺刻, 雄性颚叶端部具复杂的修饰 (图 6, 19, 26, 31) 以及前侧眼显著远离 (图 5, 17) 等可相区别。新属的腹部盾板完整, 雄性胸甲前侧角无修饰, 与拟

关键词 分类, 分布, 鉴别特征, 模式, 东南亚。

中图分类号 Q959.226

巨膝蛛属 *Camptoscaphiella* 及马达加斯加蛛属 *Malagiella* 不同; 新属第 1、第 2 足具成对的长刺, 盾板-腹柄区无修饰而与巨膝蛛属 *Opopaea* 不同; 新属第 1、第 2 足具成对的长刺而与膨须蛛属 *Prethopalpus* 相区别。

彼得万象蛛, 新种 *Vientianea peterjaegeri* sp. nov. (图 1 ~ 33)

正模雄 (IZCAS AR 19393), 老挝万象省旺阳区, 琅勃拉邦北 4.01 km, 佬亩洞 (18°57'N, 102°26'E; 海拔 314 m), 2012-12-02, 姚志远采。副模: 1 雌 (IZCAS AR 19393), 采集数据同正模; 1 雌 (IZCAS AR 19414), 采集数据同正模。

鉴别特征 新种可通过雌性生殖区独特的结构 (图 21 ~ 23, 32 ~ 33), 雄性膨大的触肢膝节及复杂的生殖球结构 (图 24 ~ 25, 27 ~ 30) 等与卵形蛛科其它物种相区别。

词源: 新种种名源自 Peter Jäger 博士的名字, 以感谢他组织了 2012 年在老挝的野外考察工作, 名词。

* 通讯作者, E-mail: lisq@ioz.ac.cn